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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Uwe Bornmann

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EXAMINER

KENNEDY, TIMOTHY J

ART UNIT

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1791

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/533,881	Applicant(s) BORNMAN ET AL.	
	Examiner TIMOTHY KENNEDY	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) 6 and 7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 November 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/5/05 and 11/8/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Claims 6 and 7 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to the nonelected inventions of Group II and III, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 2/12/2009.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the subject matter of claim 2; that the screen band is guided through all curing stages must be shown or the feature(s) canceled from the claim(s). Only the one curing stage is shown. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an

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application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Regarding claim 1:

6. Based on the entirety of the disclosure the state of cure in relation to the process steps is indefinite. Are the filaments sufficiently cured by the suction zones by the time they reach the first curing stage (parts 5 and 6 in the drawings), or are the filaments held by suction zones up until the first curing stage and thus sufficiently cured after the first curing stage (as per the drawings)? Clarification is requested.

7. For examination purposes the Examiner will base the interpretation of claim 1 based on the drawings: that the suction zones (part 3) hold onto the filaments up until the first curing stage (parts 5 and 6), once through the first curing stage the filaments are sufficiently cured that they do not require a support (parts 7 and 8)

8. Regarding claim 2:

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9. Claim 2 places a further limitation on the action of the screen band, but it is unclear as to what other curing stages exist beyond the first curing stage, since as written there is only a first curing stage in claim 1. Clarification is requested.

10. Regarding claim 4:

11. It is unclear as to what "1-8 cm⁻¹" means with regards to mesh size. Does it mean 1 to 8 openings per centimeter, or 1 to 8 wires per centimeter? Clarification is requested.

12. For examination purposes the Examiner is interpreting mesh size to be 1 to 8 openings per centimeter.

13. Regarding claim 5:

14. It is unclear as to the difference between "mesh width" as in claim 5, and "mesh size" as in claim 4. In context of the unit "cm⁻¹", mesh width physically does not mean anything. Clarification is requested.

15. For examination purposes "mesh width" is being interpreted as "mesh size" (as in claim 4), and "10-100 cm⁻¹" is being interpreted as 10 to 100 openings per centimeter.

16. Further regarding claims 4 and 5:

17. The Examiner does not see the distinction between the phrase "if the screen band serves as a support" in claim 5 versus the phrase "if curing takes place through the screen band" as in claim 4. In either case the screen band is supporting the filaments; there is no mention of a secondary support band if the screen band is used for curing, thus both are used as supports.

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18. Also since in both claims the support is a screen, and the only two options for curing found in the disclosure are air or water. Both of which can go through the claimed mesh sizes, there is once again no difference between the screen band being used for curing or as a support.

19. For examination purposes the screen band is used for both curing and as a support, thus only the mesh sizes are relevant to claims 4 and 5

Claim Rejections - 35 USC § 102

20. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

21. Claims 1 and 2 rejected under 35 U.S.C. 102 (b) as being anticipated by Kobayashi et al (EP 1101854, already of record, herein after referred to as Kobayashi).

Regarding claim 1, Kobayashi teaches:

22. Method for the production of geotextiles (Figure 1, part 26: nonwoven fabric) of melt-spun filaments (melt spinning machine 1 and continuous fibers 15) through hydrodynamic intertwining (Figure 1, part 4: high pressure water jet ejector, and paragraphs 0016, 0021, and 0023), wherein the melt-spun filaments are deposited onto a continuous screen band (Figure 1 part 3: conveyor belt, and paragraph 0015), are transported on this screen band through the first curing stage (Figure 1, parts 4, 23, and 24, and paragraphs 0016, 0021, and 0023), wherein the filaments additionally during the entire process are fixed through suction zones (Figure 1, parts 21 and 26) on the

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screen band and in this manner are already sufficiently cured in the first curing stage, such that the transport free of disturbance without a transport band is possible (Figure 1: part 26 is released from part 3, thus teaching that the filaments are sufficiently cured and do not need a transport band)

23. Regarding claim 2:

24. The screen band is guided through all curing stages (Figure 1, parts 3 and 4, and paragraph 0015)

Claim Rejections - 35 USC § 103

25. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

26. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

27. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

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under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

28. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi, in view of Kampen et al (DE 10002451, using Derwent abstract, herein referred to as Kampen) and Kelb (U.S. Patent 3,601,860). Regarding claim 3:

29. The suction zones an underpressure of 1 to 100 mbar is applied.

30. Kobayashi teaches suction zones but is silent as to the strength of the suction.

31. In the same field of endeavor Kampen teaches an underpressure of 10-50 mbar (Derwent abstract). Motivation of such underpressure comes from Kelb, who teaches that using underpressure maintains the position of the filaments during transport, and any unwanted moisture can be removed (column 4, lines 63-67)

32. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the underpressure as taught by Kampen and Kelb, using the Kobayashi method, since doing so would help ensure the filament positioning during transport.

33. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi, in view of Kelb. Regarding claim 4, Kobayashi is silent to:

34. The mesh size of the screen band is $1-8\text{ cm}^{-1}$

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35. Kelb teaches a mesh size of 1.5 mm (column 4, lines 69-71). A mesh size of 1.5 mm means that the opening size is 1.5 mm. An opening of 1.5 mm corresponds to a mesh size of roughly 13 openings per inch. Which when converted to metric is 5.12 openings per centimeter.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the mesh size as taught by Kelb, using the Kobayashi method, since choosing such as mesh size is obvious to try since there are only so many mesh sizes. It has been shown that a person of ordinary skill has good reason to pursue the known options in their art. If this lead to an anticipated success, it is likely that it was not due to innovation but of ordinary skill and common sense. *KSR*

International Co. v. Teleflex Inc., 82 USPQ2d 1385, 1397 (2007)

36. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi, in view of Simpson et al (U.S. Patent 5,023,130, herein after referred to as Simpson). Regarding claim 5, Kobayashi is silent to:

37. The mesh size of the screen band is $10\text{-}100\text{ cm}^{-1}$

38. Simpson teaches a mesh size of 60 to 150 (abstract). A mesh size 60 to 150 means there are 60 to 150 openings per inch. Which when converted to metric is 23.62 to 59.06 openings per centimeter.

39. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the mesh size as taught by Simpson, using the Kobayashi method, since choosing such as mesh size is obvious to try since there are only so

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many mesh sizes. It has been shown that a person of ordinary skill has good reason to pursue the known options in their art. If this lead to an anticipated success, it is likely that it was not due to innovation but of ordinary skill and common sense. *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1397 (2007).

Conclusion

40. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

41. U.S. Patent 3,434,188: screen band

42. U.S. Patent 5,369,858: English equivalent to EP 0418493

43. U.S. Patent 6,471,910: suction

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TIMOTHY KENNEDY whose telephone number is (571) 270-7068. The examiner can normally be reached on Monday to Friday 9:00am to 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Del Sole can be reached on (571) 272-1130. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

tjk

/Joseph S. Del Sole/
Supervisory Patent Examiner, Art Unit 1791